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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,314	07/01/2004	Leonard Shaner	81100061 / FMC 1755 PUS	4313
28395 7590 08/19/2009 BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER SPISICH, GEORGE D	
			ART UNIT 3616	PAPER NUMBER
			MAIL DATE 08/19/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/710,314	Applicant(s) SHANER ET AL.	
	Examiner GEORGE D. SPISICH	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 26, 2009 (RCE w/ c/m amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 16-20, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 16-20, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26, 2009 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13 and 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added limitation to Claim 13 at line 7, that the bottom edge has a rear portion that is "generally parallel" to the top edge, is considered new matter and was not

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in the original specification. The Figures are not taken to include detail as specific as claiming that the edges are parallel.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,7,22 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. (USPUB2003/0168836).

Sato discloses a side airbag (1) apparatus (see at least Figs. 7 and 8) having side aspect including a triangular portion including a rounded corner (near ref. numeral 16) disposed toward a front of the airbag when the airbag is deployed. The side aspect being “at least partially” defined by a posterior edge, a top edge extending forward from the posterior edge, at least a portion of the bottom edge extending forward and upward toward the top edge, such that the side aspect substantially narrows from a back region to a front region. The triangular portion is defined by the top edge, an axis intersecting the top edge and the bottom edge and the axis being perpendicular to the top edge. Examiner points that the “axis” may be positioned to intersect the top edge just above ref. num. 20 and intersect the bottom edge near ref. "Ph". It is proper to consider this

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"axis" at any location to define what is still reasonably considered a triangular "portion" of the side aspect, and the axis is still perpendicular to the top edge. A straight top edge is not required to define the axis as perpendicular to the top edge. Due to the broad language of "at least a portion" of the bottom edge, the term "triangular portion", and "at least partially define" the airbag of Sato includes a tapering portion (in side view, the forward half of the airbag) that has "a portion" of the bottom edge extending forward and upward from the posterior edge. It includes a triangular portion (not claimed to be the entire side of the airbag). Given this "sub" portion, there is a posterior and forward area of this sub-portion. Furthermore, the axis may be drawn at any portion of the airbag and at any angle so as to meet the claim limitation and define the triangular "portion". This portion is properly considered a "triangular portion including a rounded corner".

Sato shows an inflator cooperating with the airbag to supply gas thereto, thereby facilitating deployment of the airbag.

The airbag shows what is well known in the airbag art, to provide a reinforced region (any area of the airbag such as the central portion/chamber) for providing additional strength to the airbag.

The portion of the bottom edge extending forward and upward is connected to the top edge by a radiused corner (near 16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (USPUB2003/0168836) in view of Steffens Jr. et al. (USPN 5,439,248) and further in view of Harada et al. (USPN 6,543,803).

Sato et al. has been discussed in the prior rejection. However, the airbag of Sato et al. does not have a wedge shape rear aspect and second portion being “generally rectangular” and contiguous with the first portion.

Steffens et al. (as shown in at least Fig. 6) shows a side airbag having a generally wedge shaped rear aspect narrowing from an upper region to a lower region. This shaped would provide more protection in the upper torso/upper arm region of an occupant.

It is well known in the airbag art to have various shapes for airbags that provide protection in a variety of vehicle locations and with respect to parts of a vehicle occupant's body as deemed necessary.

Sato et al. does not show the rear part of the airbag that mounts to the inflator as being generally rectangular. Harada et al. teaches the basic connection of a generally rectangular rear/second portion of a side airbag, wherein the second portion has at least one mounting hole for attachment to the inflator. This rectangular portion would partially

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define the top edge and the bottom edge and the upper (top) and lower (bottom) edges of the generally rectangular portion are parallel and therefore, a portion of the bottom edge is parallel to (a portion) of the top edge. It is considered that any portions of an airbag are contiguous with another, and does not exclude the portions from having a "transition portion" connection the portions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the airbag of Sato et al. so as to provide a wider portion of the airbag towards the upper portion of the airbag and a tapering portion towards the lower portion (where impact with the occupant's torso not as harsh due to the mass and width of the upper torso) so as to provide a wedge-shaped rear aspect as taught by Steffens Jr. et al. so as to provide enhanced protection for an occupant seated adjacent the deployed airbag and to further include a generally rectangular second portion as shown by Harada et al. and is common in the airbag art which would be contiguous with the first portion (of Sato et al.) for mounting the rear of the airbag to the inflator.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. et al. (USPUB2003/0168836) in view of Kai et al. (USPN 7,108,278).

Sato et al. has been discussed in the prior rejection. However, the airbag of Sato et al. does not have a wedge shape top aspect or vent holes to exhaust air from the airbg.

Kai et al. (as shown in at least Fig. 6) shows a side airbag having a generally wedge shaped top aspect narrowing from a posterior region to a front region. This

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shaped would provide more protection in the upper torso/upper arm region of an occupant.

It is well known in the airbag art to have various shapes for airbags that provide protection in a variety of vehicle locations and with respect to parts of a vehicle occupant's body as deemed necessary.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the airbag of Sato et al. so as to provide a wider portion of the airbag towards the posterior portion of the airbag and a tapering portion towards the front portion (where impact with the occupant's torso not as harsh due to mass and width of the upper torso) so as to provide a wedge-shaped top aspect as taught by Kai et al. so as to provide enhanced protection for an occupant seated adjacent the deployed airbag.

Claims 4,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (USPUB2003/0168836) in view of Keshavaraj et al. (USPN 6,344,251).

Sato et al. has been discussed in a prior rejection. However, Sato et al. does not show the airbag comprising a polymeric material of at least 600 denier or the inflator configured to inflate the airbag to at least 25 pounds per square inch.

Although Examiner maintains that it is well known in the art to use a known fabric of desired strength and an inflator that provides adequate inflation for occupant protection, Examiner is further relying on Keshavaraj et al. for this teaching.

Keshavaraj et al. (see col. 2, lines 45-67) discloses the use of a polymeric material having up to 840 denier and compatible with inflation of (col. 1, lines 50-52) pressures as high as 50 psi.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any known material and inflator characteristics in the airbag arrangement of Sato et al. such as one having the parameters and that is disclosed by Keshavaraj et al. since providing a strong airbag would be more durable and provide enhanced protection for the occupant seated beside the airbag.

Claims 9,12 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (USPUB2003/0168836) in view of Steffens Jr.et al. (USPN 5,439,248) and Harada et al. (USPN 6,543,803) as applied to claims 2,8 and 13 above, and further in view of Kai et al. (USPN 7,108,278).

Sato et al. in view of Steffens Jr. et al. and Harada et al. have been discussed in a prior rejection. However, none of the references show a wedge shaped top aspect.

Kai et al. (as shown in at least Fig. 6) shows a side airbag having a generally wedge shaped top aspect narrowing from a posterior region to a front region. This shaped would provide more protection in the upper torso/upper arm region of an occupant.

It is well known in the airbag art to have various shapes for airbags that provide protection in a variety of vehicle locations and with respect to parts of a vehicle occupant's body as deemed necessary.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the airbag of Sato et al. in view of Steffens Jr. et al. and Harada et al. to further have a tapered view from the top aspect, narrowing from a posterior region to a front region as taught by Kai et al. so as to provide enhanced protection for an occupant seated adjacent the deployed airbag.

Claims 10,11,16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (USPUB2003/0168836) in view of Steffens Jr. et al. (USPN 5,439,248) and Harada et al. (USPN 6,543,803) as applied to claims 2,8 and 13 above, and further in view of Keshavaraj et al. (USPN 6,344,251).

Sato et al. in view of Steffens Jr. et al. and Harada et al. has been discussed in a prior rejection. However, neither Sato et al. nor Steffens Jr. et al. or Harada et al. show the airbag comprising a polymeric material of at least 600 denier or the inflator configured to inflate the airbag to at least 25 pounds per square inch.

Although Examiner maintains that it is well known in the art to use a known fabric of desired strength and an inflator that provides adequate inflation for occupant protection, Examiner is further relying on Keshavaraj et al. for this teaching.

Keshavaraj et al. (see col. 2, lines 45-67) discloses the use of a polymeric material having up to 840 denier and compatible with inflation of (col. 1, lines 50-52) pressures as high as 50 psi.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any known material and inflator characteristics in the airbag

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arrangement of Sato et al. in view of Steffens Jr. et al. and Harada et al. such as one having the parameters and that is disclosed by Keshavaraj et al. since providing a strong airbag would be more durable and provide enhanced protection for the occupant seated beside the airbag.

Response to Arguments

Applicant's arguments filed May 26, 2009 have been fully considered but they are not persuasive.

With respect to Applicant's argument that Sato et al. does not teach an airbag being triangular, even if the rounded corner as claimed is considered, Examiner disagrees and maintains the rejection. It is Examiner's position that the use of the term side aspect has a triangular "portion" and the fact that the triangular portion is defined by an arbitrary axis, it is reasonable/possible to choose this axis at a position (as described in the Office Action) to define a triangular portion. Since Applicant has stated that the invention is a triangular portion with a rounded corner (which is no longer a triangle), it is Examiner's position that a slightly curve top edge (from where the arbitrary axis is positioned to the forward edge) and a slightly rounded bottom corner, it is still reasonably considered a triangular portion. Examiner makes the next statement to explain his position and does not intend to imply that amended language would be allowable and should new language be presented in the future, may result in a 112.1st new matter rejection: The current claim language does not require that the airbag is only made up of a first and a second portion. For instance, it is not required that the

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bottom edge only extends from the rear portion of the bottom edge in an upward and forward direction. The airbag of Sato et al. may have a bottom edge that "dips" to a lower point below the rearward portion of the bottom edge, but still reads on the claim language since it also extends upward and forward from the rear portion of the bottom edge. This interpretation is the basis of Examiner's rejections. Essentially to say that an edge extends forward and upward, does not prevent an edge that extends downward first and then forward and upward (as Sato et al. does) from still reading on the claimed details.

Again, claiming that the side aspect includes a triangular portion, does not require that the airbag be triangular in shape, only that a portion of the airbag be triangular, and when combined with the arbitrary axis that is used to define the triangular portion and that the axis can be drawn at any position (and still perpendicular to the top edge), it is reasonable to draw an axis in the airbag of Sato et al. to define what is reasonably considered and triangular portion and meeting Applicant's claimed limitations. Examiner's position is also, that a line/axis can be properly considered perpendicular to a slightly curved edge/line.

With respect to the newly added limitation (to claim 8) that the second portion be "generally rectangular", Examiner has addressed this limitation with a new reference/rejection. It is Examiner's position that a rectangular rear/mounting portion of the airbag is a common and basic airbag shape and manner of mounting a seat/side airbag.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE D. SPISICH whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GDS/
Examiner, Art Unit 3616
August 15, 2009

/Paul N. Dickson/
Supervisory Patent Examiner, Art Unit 3616